REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 20-27 are currently pending. Claims 1, 6, and 7 have been cancelled without prejudice; and Claims 20-27 have been added by the present amendment. The additions to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1, 6, and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,671,323 to Tahara et al. (hereinafter "the '323 patent") in view of U.S. Patent No. 7,013,116 to Ashikhmin et al. (hereinafter "the '116 patent").

Applicants respectfully submit that the rejections of Claims 1, 6, and 7 are rendered moot by the present cancellation of those claims.

The present amendment also sets forth new Claims 20-27 for examination on the merits. No new matter has been added.[1]

New Claim 20 is directed to an encoding device, comprising: (1) means for encoding an input image signal to generate a bitstream; (2) means for generating buffer characteristics information about buffering during decoding of the bitstream, wherein the buffer characteristics information includes an input bit rate for a decoder buffer and a size of the decoder buffer for use during decoding of the bitstream, wherein the input bit rate and the size of the decoder buffer are used to determine whether the bitstream is decodable at a decoding device according to a combination between the input bit rate and the size of the decoder buffer; and (3) means for multiplexing the bistream and the buffer characteristics information.

[1] See, e.g., Figures 4, 5, and 7 and the discussion related thereto in the specification.

Applicants respectfully submit that new Claim 20 patentably defines over any proper combination of the '323 and '116 patents.

The '323 patent is directed to a encoding apparatus for encoding input video data, including means for extracting ancillary data that are added in the blank intervals of the input video data from the input video data; means for encoding the input video data to generate encoded streams; and means for controlling the encoding means to insert the ancillary data into a picture layer of the encoded streams. In particular, as noted in the outstanding Office Action, the '323 patent discloses a sequence header in Figure 11, and a picture header in Figure 23. In particular, Figure 11 in the '323 patent discloses that the sequence header includes the fields frame__rate__code, bit__rate__value, and vbv__buffer size__value.

However, Applicants respectfully submit that the '323 patent fails to disclose means for generating buffer characteristic information about buffering during decoding of the bitstream, wherein the buffer characteristics information includes an input bit rate for a decoder buffer and a size of the decoder buffer for use during the decoding the bitstream, wherein the input bit rate and the size of the decoder buffer are used to determine whether the bitstream is decodable at a decoding device according to a combination between the input bit rate and the size of the decoder buffer, as recited in new Claim 20. In particular, Applicants respectfully submit that the '323 patent is silent regarding the input bit rate and the size of the decoder buffer being used to determine whether the bitstream is decodable at a decoding device according to a combination between the input bit rate and the size of the decoder buffer, as recited in new Claim 20. In this regard, Applicants note that the outstanding Office Action appears to admit that the '323 patent does not disclose information used to generate a characteristic curve that is used to determine whether the bitstream is decodable at a decoding device. Further, as discussed above, the '323 patent does not disclose that a combination

between the input bit rate and the size of the decoder buffer is used to determine whether the bitstream is decodable at a decoding device, as required by new Claim 20.

The '116 patent is directed to a transmitter of a wireless communication device that transmits an encoded signal to a receiver that has a detector. In particular, the '116 patent discloses that the transmitter includes an encoder that encodes a signal using a first channel code responsive to an indication that the detector has a first transfer characteristic, and that encodes the signal using a second channel code, different from the first channel code, in response to an indication that the detector has a second transfer characteristic, wherein the second transfer characteristic is different from the first transfer characteristic. Further, as noted by the outstanding Office Action, the '116 patent discloses that the first channel code is decodable by a first channel decoder, wherein a curve of the transfer characteristic of the detector is above a curve of a reflected transpose of the curve of the transfer characteristic of the first channel decoder for about 95% of the curve.

While new Claim 20 does not recite a characteristic curve, Applicants note that the curves disclosed by the '116 patent in Figures 4, 5, and 8 are "transfer characteristic curves" for a MIMO detector, wherein the x-axis indicates the measure of the *a priori* mutual information at the detector input, and the y-axis is an indication of the extrinsic mutual information content at the detector output. See columns 5 and 6 in the '116 patent, which describe the transfer characteristic curve. However, Applicants respectfully submit that Figures 4, 5, and 8, which were cited by the Office Action, are unrelated to a combination between the input bit rate and the size of the detector buffer, as recited in new Claim 20.

In particular, Applicants respectfully submit that the '116 patent fails to disclose means for generating buffer characteristics including an input bit rate and a size of the decoder buffer, wherein the input bit rate and the size of the decoder buffer are used to determine whether the bitstream is decodable at a decoding device according to the

combination between the input bit rate and the size of the decoder buffer, as recited in new Claim 20. In particular, Applicants respectfully submit that the disclosures regarding the "transfer characteristic curve" recited in the '116 claims, which has the stated benefit of decreasing the bit error rate of the decoded signal, are unrelated to a combination between the input bit rate and the size of the decoder buffer, which is used to determine whether the bitstream is decodable at a decoding device, as recited in Claim 20. The '116 patent is silent regarding a combination between the input bit rate and the size of the decoder buffer being used to determine whether the bitstream is decodable in the decoding device.

Thus, no matter how the teachings of the '323 and '116 patents are combined, the combination does not teach or suggest means for generating buffer characteristics including an input bit rate for a decoder buffer and a size of the decoder buffer, the input bit rate and the size of the decoder buffer being used to determine whether the bitstream is decodable at a decoding device according to a combination between the input bit rate and the size of the decoder buffer, as recited in new Claim 20. Accordingly, Applicants respectfully submit that new Claim 20 patentably defines over any proper combination of the '323 and '116 patents.

New dependent Claims 21-25 further clarify the invention recited in new Claim 20. No new matter has been added.

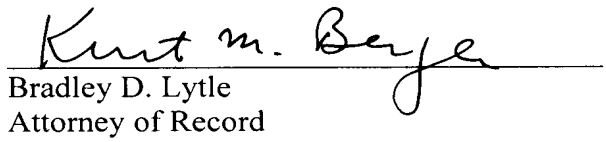
Further, new independent Claims 26 and 27 recite limitations analogous to the limitations recited in independent Claim 20. In particular, Claim 26 is an encoding method that recites steps similar to the functionality recited in Claim 20, while Claim 27 is a non-means-plus-function claim corresponding to Claim 20. Accordingly, for the reasons stated above, Applicants respectfully submit that new Claims 26 and 27 patentably define over any proper combination of the '323 and '116 patents.

Thus, it is respectfully submitted that independent Claims 20, 26, and 27 (and all associated dependent claims) patentably define over any proper combination of the '323 and '116 patents.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Kurt M. Berger, Ph.D.
Registration No. 51,461

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)